Habitat Assessment for Dormice at Merrow Lane

Kathryn Killner & Dave Williams, Surrey Dormouse Group 18th April 2025

Overview

The woodland on both sides of Merrow Lane was assessed for its suitability to support hazel dormice *Muscardinus avellanarius* on 18th April 2025 following the guidelines provided in the Dormouse Mitigation Handbook 3rd Edition (Mammal Society, 2025). The handbook states "*The possibility of dormice should always be considered anywhere in Southeast England*". The closest dormouse records are at approximately 2km to the south east at Trodd's Lane, with connections across the landscape to Merrow Lane.

Species Diversity

The woodland on both sides of Merrow Lane has a high species diversity. Although not designated as ancient semi-natural woodland (DEFRA Magic Map), this habitat lies immediately to the south of New Inn Lane, with further parcels of ancient replanted woodland approximately 300m and 800m to the east.

The woodland has hazel *Corylus avellana* throughout, with the larger parcel to the west showing greater variation in levels of ground flora from dense to sparse, and some shading from tall standard trees, particularly English oak *Quercus robur.* Oak supports a wide range of species, including dormice which nest in tree cavities. Other species providing food and shelter for dormice through their active season include bramble *Rubus fruticosus agg.,* hawthorn *Crataegus monogyna,* and the ancient woodland indicator woody species field maple *Acer campestre*, holly *Ilex aquifolium* and crab apple *Malus sylvestris.* The woodland contains at least one veteran oak, to the south of the eastern parcel.

Herbaceous ancient woodland indicator species present on both sides of Merrow Lane include goldilocks buttercup *Ranunculus auricomus*, English bluebell *Hyacinthoides non-scripta* (protected under Schedule 8 of the Wildlife and Countryside Act, 1981 (WCA) (as amended)), sanicle *Sanicula Europaea* and wood melick *Melica uniflora.*

The invasive variegated yellow archangel *Lamiastrum galeobdolon ssp. argentatum* (listed under Schedule 9 of the WCA) is also present in one area, with non-native rhododendron *Rhododendron sp.* and cherry laurel *Prunus laurocerasus* also present. See below for habitat photographs and full plant species list.

Species Diversity and Structural Complexity

West of Merrow Lane

- Species Diversity: High (over 6 woody species per ha.).
- Structural Complexity: a) High (canopy and understorey layers present and well-connected) in some areas and b) Low (canopy layer present with sparse or absent understorey and scrub layers) in others.

East of Merrow Lane

- Species Diversity: High (over 6 woody species per ha.).
- Structural Complexity: High (canopy and understorey layers present and well-connected).

Quality Assessment

Given the presence of High Diversity and High Complexity habitat, it can be concluded that there is Excellent quality habitat for dormice on both sides of Merrow Lane, interspersed with some areas of Fair/Poor quality to the west.

There is some connectivity at canopy level across the road to allow movement of dormice. Small gaps of up to 10m can sometimes be crossed by dormice during nightly foraging movements and therefore do not represent a physical

barrier. Merrow Lane is therefore not considered to hamper dormice movement between the woodland on each side. The scrub bordering the arable field to the east of Merrow Lane is particularly suitable for dormice, providing dense shelter habitat as well as flowers and fruits throughout the active season.

Population Estimate

Of approximately 7ha habitat in total, erring on the side of caution and using the estimate of 3.5ha being of Excellent quality and 3.5ha of Fair/Poor quality, the woodland has the potential to support a population of 42 adult dormice.

Further comments

It is considered that the woodland to the east of Merrow Lane provides an important habitat corridor connecting land south of, and to the east along, the railway (railways corridors typically provide excellent dormouse habitat), as far as the A3 to the north, and from there to the east to over 70ha of woodland at Cott's Wood and Frithy's Wood, for dormice and for other wildlife. This corridor should be retained and enhanced with an additional vegetated buffer along the field edge to minimise disturbance from construction and eventual residential occupation.

Removal of any hedgerows heading east across the landscape from Merrow Lane would be detrimental to the movement of dormice and other wildlife; it is therefore important to retain and to strengthen existing hedgerows as part of any proposal.

Dormouse nestboxes were observed in woodland to the east of Merrow Lane. As stated in the Mitigation Handbook, **failure to find dormice using this method is not evidence that they are absent;** boxes should always be used in conjunction with other methods. One nest tube (missing inner wooden platform) was also present.

It is recommended that further survey is carried out using nest tubes and/or footprint tunnels, following the protocols provided in the Mitigation Handbook, in order to prove dormouse presence or to deliver sufficient survey effort to conclude they are likely absent from the site.

Habitat Photographs

West of Merrow Lane

Dense understorey

Sparse understorey below hazel

Overshading by standard trees

East of Merrow Lane

Dense bramble along field margin

Nest tube in scrubby habitat

Nest box in woodland

Full Plant Species List

Common name	Scientific name
Ash	*Fraxinus excelsior*
Birch sp.	*Betula sp.*
Blackthorn	*Prunus spinosa*
Box	*Buxus sempervirens*
Bracken	*Pteridium aquilinum*
Bramble	*Rubus fruticosus agg.*
Broad leaved dock	*Rumex obtusifolius*
Celandine	*Ficaria verna*
Cherry laurel	*Prunus laurocerasus*
Cherry sp.	*Prunus sp.*
Cleavers	*Galium aparine*
Crab apple*	*Malus sylvestris*
Dandelion sp.	*Taraxacum sp.*
Elder	*Sambucus nigra*
Enchanter's nightshade	*Circaea lutetiana*
English bluebell*	*Hyacinthoides non-scripta*
English oak	*Quercus robur*
Field maple*	*Acer campestre*
Dog's mercury	*Mercurialis perennis*
Germander speedwell	*Veronica chamaedrys*
Goldilocks buttercup*	*Ranunculus auricomus*
Ground ivy	*Glechoma hederacea*
Hairy bittercress	*Cardamine hirsuta*
Hart's tongue fern*	*Asplenium scolopendrium*
Hawthorn	*Crataegus monogyna*
Hazel	*Corylus avellana*
Hedge woundwort	*Stachys sylvatica*
Herb robert	*Geranium robertianum*
Holly*	*Ilex aquifolium*
Honeysuckle	*Lonicera periclymenum*
Ivy	*Hedera helix*
Pendulous sedge*	*Carex pendula*
Rhododendron	*Rhododendron ponticum*
Rose sp.	*Rosa sp.*
Sanicle*	*Sanicula europaea*
Stinking iris*	*Iris foetidissima*
Sycamore	*Acer pseudoplatanus*
Variegated yellow archangel	*Lamiastrum galeobdolon ssp. argentatum*
Wild arum*	*Arum maculatum*
Willow sp.	*Salix sp.*
Wood avens	*Geum urbanum*
Wood melick*	*Melica uniflora*
Wood millet*	*Milium effusum*
Wood sedge*	*Carex sylvatica*

*Ancient woodland indicator species